



# Certificate of analysis

Product name: Micafungin FR-179642

Cas number: 168110-44-9

Molecular Formula: C<sub>35</sub>H<sub>52</sub>N<sub>8</sub>O<sub>20</sub>S

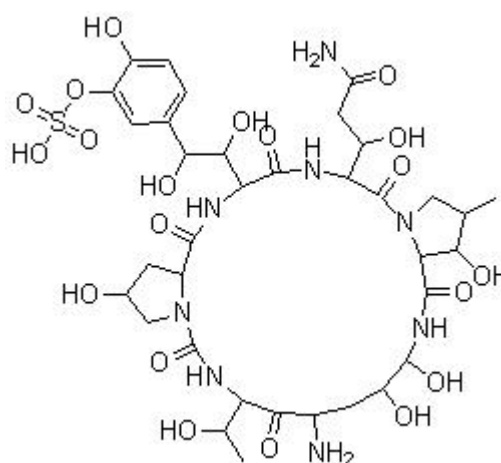
Molecular Weight: 936.90

Date of production: Jan. 22, 2020

Batch NO: 20200122

EXP DATE: Jan. 21, 2022

Chemical structure:



Items	Specifications	Results
<b>Description</b>	Off-white to white powder	Conform
<b>Identification</b>	IR: Spectrum of test sample should confirm to that of reference standard spectrum.	Conform
<b>Water</b>	≤8.0%	5.8%
<b>Specific optical rotation</b>	-30.0° ~ -36.0 °	-31.5°
<b>PH</b>	5.0~7.0	6.1
<b>Residual solvents</b>	Ethanol ≤5000ppm Methanol ≤3000ppm Acetonitrile ≤410ppm	3ppm 12ppm 9ppm
<b>Related substances</b>	Impurity C: ≤0.60% Impurity D: ≤0.50% Impurity E: ≤2.00% Any unspecified individual impurity ≤0.15% Total impurities ≤3.0%	0.20% 0.02% 0.30% 0.06% 0.7%
<b>Assay</b>	95%~102%(on anhydrous basis)	98.9%

Storage condition: Store in a tight container and not exceeding -20°C, protected from light.

**Conclusion: It complies with the Enterprise Standard.**

Analyst: Zhao

Checker: Liu

Q.C Director: Fang